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### **Specifications**

#### **1. Title of the invention:**

Disaster preventing administrative radio community  
reception system

#### **2. Field of Patent Claims:**

(1) At the disaster preventing administrative radio  
community reception system, in case of performing a  
community reception of a disaster preventing administrative  
radio wave, the above mentioned disaster preventing

administrative radio wave is caught by an exclusive antenna, and the above mentioned caught signal is led to a disaster preventing receiver, and only when an area code contained in the disaster preventing radio wave coincides to an area code used by the above mentioned disaster preventing receiver, a power source unit is started, a high frequency signal is modulated by a low frequency disaster preventing information signal demodulated by the above mentioned disaster prevention receiver by starting of this power source unit, this modulated high frequency signal and a power source for driving the receiver passed modulator by the above mentioned power source unit are led to the disaster preventing receiver for a television community receiving facility arranged separately respectively through a mixer of television community receiving facility and a power injector, and a community reception of disaster preventing information is performed.

(2) At the disaster preventing administrative radio community reception system, in case of performing a community reception of a disaster preventing administrative radio wave, the above mentioned disaster preventing administrative radio wave is caught by an exclusive antenna, and the above mentioned caught signal is led to a disaster preventing receiver, and only when an area code contained in the disaster preventing radio wave coincides to an area code used by the above mentioned disaster preventing receiver, a power source unit is started, a high frequency signal is modulated by a low frequency disaster preventing information signal demodulated by the above mentioned disaster prevention receiver by starting of this power source unit, this modulated high frequency signal and

a power source for driving the receiver passed modulator by the above mentioned power source unit are led to the disaster preventing receiver for a television community receiving facility arranged separately respectively through a mixer of television community receiving facility and a power injector, and a community reception of disaster preventing information is performed; moreover, to confirm again the above mentioned disaster preventing information by the above mentioned respective exclusive disaster preventing receiver, the other high frequency signal which differs from the above mentioned high frequency signal is modulated by the above mentioned low frequency disaster preventing information signal once stored in a storing device, by switching a reception selecting switch of the above mentioned exclusive disaster preventing receiver into re-broadcasting, a re-broadcasting can be performed after the time period when timer used by the above mentioned power source unit was set.

(3) At the disaster preventing administrative radio community reception system, according to [Claim 2], the above mentioned exclusive disaster preventing receiver provides a disaster preventing signal receiving light, and when the above mentioned disaster preventing information signal is received, the above mentioned receiving light is lit.

### 3. Detailed explanation of the Invention:

#### [Technical Field of the Invention]:

The present invention relates to a disaster preventing administrative radio community reception system.

[Technique of the Prior Art]

In recent years, the disaster preventing administrative radio set in each area has been set in interval with an appropriate receiving branch station, a driving signal radio wave from the main station was received, an amplifier of the branch station was operated, and information or warning was transmitted to inhabitants by sound of loud-speaker arranged outside.

Also, the method for arranging a respective receiver in each address was used as the method for improving the disadvantage of this outside loud-speaking system.

[The problem which the Present Invention intends to solve]

At the above mentioned outside loud-speaking system, an influence of outside noise is received, it can be not heard during heavy rain, it is difficult to hear due to wind, a noise pollution occurs just near the loud-speaker, there is an area where it is difficult to hear due to sound wave interference; in case of recent doors, structure from aluminum sash, a sound wave can difficultly pass, especially, it is remarkable at middle and high residences, moreover, a sound wave can difficultly arrive at area of building shadow.

Also, at the system when a separate receiver is arranged at each address, this separate receiver is expensive, and it is difficult to perform a good reception at separate receiver arranged in house, due to radio wave cover at recent middle and high residences by a reinforced concrete.

Consequently, the purpose of the present invention is to consider an important theme such as a complete transferring of information (disaster preventing information) transmitted

by a disaster preventing administrative radio, to residents of reinforced concrete middle and high residence dwellers, and providing a disaster preventing administrative radio community reception system improved the above mentioned disadvantages.

[Means for solving the problem]

To reach the above mentioned purpose, at the disaster preventing administrative radio community reception system, according to [Claim 1] of the present Specifications, in case of performing a community reception of a disaster preventing administrative radio wave, the above mentioned disaster preventing administrative radio wave is caught by an exclusive antenna, and the above mentioned caught signal is led to a disaster preventing receiver, and only when an area code contained in the disaster preventing radio wave coincides to an area code used by the above mentioned disaster preventing receiver, a power source unit is started, a high frequency signal is modulated by a low frequency disaster preventing information signal demodulated by the above mentioned disaster prevention receiver by starting of this power source unit, this modulated high frequency signal and a power source for driving the receiver passed modulator by the above mentioned power source unit are led to the disaster preventing receiver for a television community receiving facility arranged separately respectively through a mixer of television community receiving facility and a power injector, and a community reception of disaster preventing information is performed.

Moreover, at the disaster preventing administrative radio community reception system, according to [Claim 2] of the present Specifications, in case of performing a community reception of a disaster preventing administrative radio wave, the above mentioned disaster preventing administrative radio wave is caught by an exclusive antenna, and the above mentioned caught signal is led to a disaster preventing receiver, and only when an area code contained in the disaster preventing radio wave coincides to an area code used by the above mentioned disaster preventing receiver, a power source unit is started, a high frequency signal is modulated by a low frequency disaster preventing information signal demodulated by the above mentioned disaster prevention receiver by starting of this power source unit, this modulated high frequency signal and a power source for driving the receiver passed modulator by the above mentioned power source unit are led to the disaster preventing receiver for a television community receiving facility arranged separately respectively through a mixer of television community receiving facility and a power injector, and a community reception of disaster preventing information is performed; moreover, to confirm again the above mentioned disaster preventing information by the above mentioned respective exclusive disaster preventing receiver, the other high frequency signal which differs from the above mentioned high frequency signal is modulated by the above mentioned low frequency disaster preventing information signal once stored in a storing device, by switching a reception selecting switch of the above mentioned exclusive disaster preventing receiver into re-broadcasting, a re-broadcasting can be performed after

the time period when timer used by the above mentioned power source unit was set.

[Description of the preferred embodiment]

The present invention will be explained in details further below according to the preferred embodiment referring to drawings.

FIGURE 1 is a block diagram showing a constitution of the preferred embodiment related to the present invention.

At the present system, first of all, for example, a disaster preventing administrative radio wave (disaster preventing radio wave) of 60 MHz is caught by an exclusive antenna 1, this caught signal is led to a disaster preventing receiver 2 of a branch station through a cable of the same axis, and a power source unit 3 of the branch station coincided to an area code included in the disaster preventing radio wave is started. In this time, the disaster preventing receiver is provided at arrival of presence of the disaster preventing radio wave and the power source is usually ON.

Then, as a result, at the first invention described at the present specifications, a low frequency amplifier 4, a modulator 5 and a transformer 6 start operating by starting of the power source unit 3. At the modulator 5, a low frequency disaster preventing information signal (for example, sound signal) which has been already demodulated by the receiver 2 is amplified by the low frequency amplifier 4, a high frequency carrier wave (f1) of 76 ~ 90 MHz is frequency modulated at this signal, its output is led to the mixer 93 of the television community receiving facility 9 as a carrier disaster preventing information signal through the same axis cable.

Also, the power source for an exclusive disaster preventing receiver 10 of the television community receiving facility of AC 30 V is multiplied at the same axis cable through a power injector 94 of the television community receiving facility 9 from the started power source unit, and its power transmission is performed to TV terminal of the television receiver arranged at plurality of respective address.

Consequently, at the television community receiving facility 9, AC 30 V, frequency modulated carrier disaster preventing information signal and existed FM broadcasting signal, television broadcasting signal flow, but AC 30 V and carrier disaster preventing information signal flow only in case of disaster preventing radio wave coincided in area code receiving the disaster preventing radio wave. Then, case when in reception of complete code of the disaster preventing radio wave and radio wave shooting are stopped or in case of code signal which is different to are code of the branch station, AC 30 V and carrier disaster preventing information signal are not flown-in.

The exclusive disaster preventing receiver 10 is directly connected to an end terminal of each respective address of television community receiving facility. Thus, if there is a diverge distributor in a halfway, it uses a device of a power passing type. At inner part of this exclusive disaster preventing receiver 10, AC 30 V is separated from a high frequency carrier disaster preventing information signal, Ac 30 V is added into a power source circuit, and the carrier disaster preventing information signal is added into a high frequency input circuit.



Consequently, only when the disaster preventing radio was received, the power source of the exclusive disaster preventing receiver 10 of a respective address comes, the carrier disaster preventing information signal is input, the disaster preventing information can be received inside good and the content can be correctly caught.

The second invention described in the present Specifications repeats the above mentioned first invention, and adds a recording device 7 and modulator 8 shown in FIGURE 1 as functions. At the modulator 8, a carrier  $f_2$  has a different frequency than that of the carrier  $f_1$  of the above mentioned modulator 5, it is transmitted at the same time with a frequency modulated wave of the carrier  $f_1$ , but an input signal of this modulator 8 is performed through the recording device 7 such as endless tape recorder.

Consequently, when a content of broadcasting of the disaster preventing radio is desired to be heard for confirming once more at that place after the disaster preventing information signal was received at respective address, the disaster preventing information signal once stored in the recording device 7 can be received again by switching a reception selecting switch of the disaster preventing exclusive receiver 10 in confirm (re-broadcasting). Therefore, a driving timer is arranged in the power source unit 3, and re-broadcasting can be heard by operating 30 ~ 60 minutes or 24 hours according to necessity, after broadcasting of the disaster preventing administrative radio was completed.

Moreover, when the disaster preventing exclusive receiver 10 received the carrier disaster preventing information signal, the disaster preventing information signal can be heard by switching the reception selecting switch into confirm if a reception light lights when person returned home, by lighting the disaster preventing signal reception light.

Also, an input voltage of the exclusive disaster preventing receiver 10 is amplified by the amplifier of the television community receiving facility 9, therefore, this receiver can adopt a simple circuit, and it can be cheaper in comparison with the general disaster preventing respective address receiver. Thus, a without electricity failure device is adopted in power source, therefore, it can be practically supplied even if electricity failure will be performed.

At last, a block diagram showing a structure simply formed a structure of the present invention system will be explained referring to the FIGURE 2.

If a selecting signal of this area is received at the disaster preventing receiver 2, the power source unit is operated, and a low frequency amplifier 4 is operated by the AC 100 V power source. An output of this amplifier 4 flows being loaded in the same axis cable of the television community receiving facility. Consequently, if there is a diverge distributor or the like in a halfway, these diverge distributors or the like should use a materials of a current passing type, but at each address, the disaster preventing radio signal can be received at only speaker 11.

### **[Result of the Present Invention]**

As mentioned above, a community reception system of the present invention is used therefore, each kind of disadvantages which were problem in the prior disaster preventing administrative radio community reception system can be removed, the television community receiving facility exclusive disaster preventing receiver which should be newly arranged also can use a cheap simple item, a disaster preventing information signal can be received good inside of reinforced concrete middle and high residence at appropriate timing, and its content can be certainly caught.

#### **4. Brief description of the drawings:**

FIGURE 1 is a block diagram showing a constitution of the preferred embodiment related to the present invention; FIGURE 2 is a block diagram showing an example of this transformed constitution.

### **[Description of Numbers]**

1, 91 are receiving antennas;  
2 is a disaster preventing receiver;  
3 is a power source unit;  
4 is a low frequency amplifier;  
5, 8 are modulators;  
6 is a transformer;        7 is a storing device;  
9 is a television community receiving facility;  
92 is a head amp;  
93 is a mixer;  
94 is a power injector;  
10 is an exclusive disaster preventing receiver;  
11 is a speaker.

FIG. 1

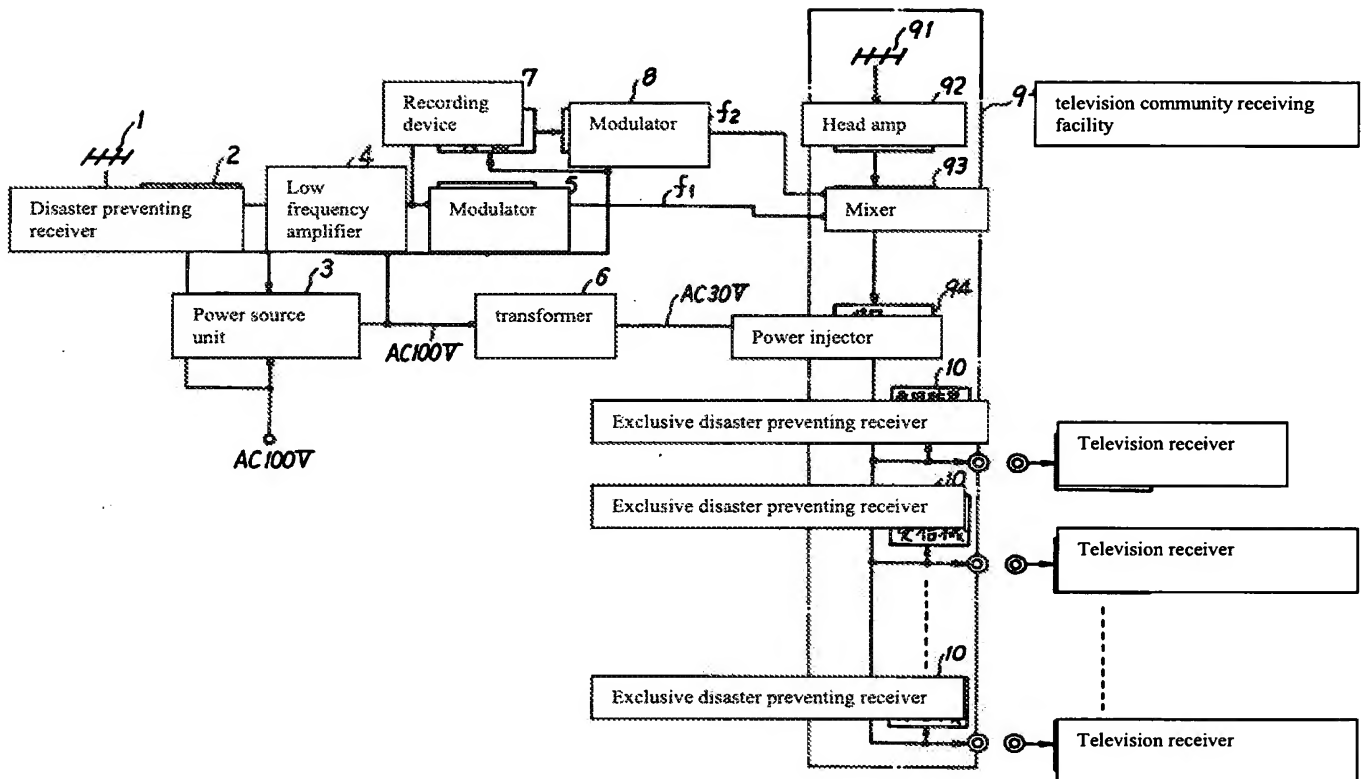


FIG.2

